SEPA ENVIRONMENTAL CHECKLIST

UPDATED 2014

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

***Instructions for applicants*:** [help]

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [help]

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. background [help]

1. Name of proposed project, if applicable: [help]
   WDFW Wiley Slough Tidegate Replacement

2. Name of applicant: [help]
   Washington Department of Fish & Wildlife (WDFW)

3. Address and phone number of applicant and contact person: [help]

600 Capitol Way North, Olympia, WA 98501: Chris Gourley (360) 902-8392

4. Date checklist prepared: [help]

12/16/14

5. Agency requesting checklist: [help]

WDFW

6. Proposed timing or schedule (including phasing, if applicable): [help]

Work can begin as early as July 2015, or when permits are issued. The project is expected to be completed within one season from July 1 – February 15 in any given year.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [help]

No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [help]

None at this time.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [help]

None are known at this time.

10. List any government approvals or permits that will be needed for your proposal, if known. [help]

Anticipated permits are Skagit County Shoreline Permit and Grading Permit; Department of the Army permit; Department of Ecology Certification; WDFW HPA

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [help]

The proposed project will replace a tidegate that drains Wiley Slough within the Skagit Wildlife Area Estuary Unit. The tidegate does not function properly and the current tidegates have shifted from their original locations. The project area will be blocked on either side of the current tidegates with cofferdams. The area will be dewatered and the current pipes and tidegates will be demolished. The new box culvert with 2 side-hinge tidegates, measuring 8' by 10' each will be installed and the dike rebuilt in the same location.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [help]

The Wiley Slough tidegate is located in the Skagit Wildlife Area in Skagit County on Fir Island. The headquarters office is located at 21961 Wylie Road, Mount Vernon. Take I-5 to Exit 221. Go west from the freeway to Fir Island Road, following the signs for Conway/La Conner. In 1.8 miles, turn left onto Wiley Road and follow for 1 mile to a T intersection and a WDFW sign. Vere right and turn into the parking lot. The parking lot is for the public access and is closed between dusk and dawn. The project site is located southwest of the parking lot on the dike. It is located in Township 33N, Range 3E, Section 26 and the work will occur on parcel numbers 16123 and 127909.

B. ENVIRONMENTAL ELEMENTS [help]

1. Earth

a. General description of the site [help]
(circle one): **Flat**, rolling, hilly, steep slopes, mountainous,
other _____

b. What is the steepest slope on the site (approximate percent slope)? [help]

The dike slopes are about 2:1 slopes. The rest of the area varies little in topography.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]

This area is mostly Tacoma silt loam (drained), hydraquents (tidal), and Briscot fine sandy loam. These soils are all usually found on floodplains, deltas, and tidal flats. These types of soils are frequently flooded and are poorly drained from parent materials of mostly alluvium.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [help]

No.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [help]

The current dike will be removed and the current structures will be demolished. The tidegates will be replaced with side-hinge tidegates. This project will allow for proper flow between the slough and the estuary and reduce the flooding of adjacent farm fields. The total construction disturbance area is approximately 6,724 square feet. Rip rap that is removed from the current structure will be reused in the new structure. Concrete structures for the wing walls and the box culvert will impact approximately 574 square feet. Some temporary fill will be used for work pads and cofferdams, but this will not stay in place after project construction. Fill that needs to be imported will be sourced as locally as possible.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help]

It is possible that erosion could occur on the site due to clearing and grading. A silt fence will be installed at the perimeter of the project limits as seen in the site plans to limit the movement of sediment into waterways. All slopes will be seeded and mulched to reduce erosion once the project is complete. Areas of steep slopes at and behind the wing walls are also to be armored with rip rap that is already serving a similar purpose on the site.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [help]

Impervious surfaces will not change significantly on the site. The dike will be rebuilt in the same area and the culvert is below the dike.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [help]

A silt fence will be installed at the perimeter of the project limits to limit the movement of sediment into waterways. All slopes will be seeded and mulched to reduce erosion once the project is complete.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]

Air emissions may increase slightly due to construction equipment, but these impacts will be temporary.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [help]

No emissions or odors will affect the proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any: [help]

Standard emission control converters and mufflers will be used by construction vehicles.

3. **Water**

a. Surface Water: [help]

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [help]

The site is located on the Estuary Unit of the Skagit Wildlife Area. This area has many sloughs and agricultural ditches that connect, primarily via tidegates, to the estuary of the Skagit River Delta. The sloughs and ditches remain freshwater while the larger sloughs that divide the island into sections are brackish depending on the tidal influences at given times. Wiley Slough is a freshwater slough that drains primarily farm fields in the area.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [help]

The dike runs along the waterways and crosses waterway at tidegates. This particular tidegate is a division between Wiley Slough and the estuary.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [help]

All fill will be from the site. If additional fill is required, it will be locally sourced, if possible.

Material	Below OHWM		Above OHWM	
	SF	CY	SF	CY
Soil excavation	4204	1010	1500	200
Concrete demolition	400	104	0	0
Total removal	4604	1114	1500	200
Soil backfill	2816	298	0	0
Concrete fill	0	0	574	100
Total fill	2816	298	574	100
Temp Disturbed Wetland Area	2058	-	-	-
Construction Disturbance Limit	6724	-	5974	-

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help]

Water will be removed from the area via pumps. A cofferdam will be built on each side to prevent additional water from entering the area and diversions will be set up to pump water to the estuary. See sheet 5 for details.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]

The project is within Zone A7 of the 100-year floodplain where base flood elevations and flood hazard factors have been determined at approximately 8 feet. (FEMA map number 5301510425C)

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [help]
There will be no discharges of waste materials to surface waters.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]
No groundwater will be withdrawn.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [help]
There will be no waste materials discharged.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [help]
There are no additional storm water measures incorporated. The waters that run off of the dike will flow down a vegetated slope to the ditch and slough where they can be filtered further through vegetation and infiltration.

2) Could waste materials enter ground or surface waters? If so, generally describe. [help]
Waste materials should not be generated by the site.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.
The site drainage patterns should only be altered by the incorporation of the new tidegate. With a better functioning tidegate, the freshwater will be able to drain more readily when needed.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:
No additional measures are proposed.

4. **Plants** [help]

a. Check the types of vegetation found on the site: [help]

_x_ deciduous tree: **alder**, maple, aspen, **cottonwood**
_x_ evergreen tree: **fir**, cedar, pine, **spruce**
____shrubs

_x_ grass
_x_ pasture
____ crop or grain
____ Orchards, vineyards or other permanent crops.
_x_ wet soil plants: **cattail**, buttercup, bullrush, skunk cabbage, other
____ water plants: water lily, eelgrass, milfoil, other
____ other types of vegetation

b. What kind and amount of vegetation will be removed or altered? [help]

Only vegetation that needs to be removed will be. This will be comprised of mainly low-growing cover plants, grasses, and rushes. Plants will be removed in the immediate footprint of the project.

c. List threatened and endangered species known to be on or near the site. [help]

The Natural Heritage Program (NHP) databases as well as the federal agency listings (USFWS) were examined for threatened or endangered plants on December 11, 2014. Threatened plants listed in Skagit County include the following: *Brotherella roellii* (Roll's golden log moss), *Kalmia procumbens* (alpine azalea), *Impatiens noli-tangere* (western jewel-weed), *Lobelia dortmanna* (water lobelia), *Loiseleuria procumbens* (Alpine azalea), and *Ranunculus californicus* (Califronia buttercup). The two endangered plants listed are *Castilleja levisecta* (golden paintbrush) and *Meconella oregana* (white meconella) and neither has been observed in the county since before 1977. Of all the listed species, none prefer a lowland estuarine environment.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [help]

Disturbed areas will be restored and seeded.

e. List all noxious weeds and invasive species known to be on or near the site.

Noxious weeds in the area include purple loosestrife, knotweed, and spartina.

5. **Animals**

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include: [help]

birds: **hawk, heron, eagle, songbirds**, other:
mammals: **deer,** bear, **elk**, beaver, other:
fish: bass, **salmon**, **trout**, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site. [help]

The gray wolf is federally listed in this area as endangered. The following species are listed as threatened: Oregon spotted frog, yellow-billed cuckoo, northern spotted owl, marbled murrelet, bull trout, grizzly bear, and Canada lynx. The whitebark pine is a candidate

species and the brown pelican is in recovery status. All of these species are listed for the county the project is occurring in.

c. Is the site part of a migration route? If so, explain. [help]

This area is part of the Pacific Flyway bird migration route.

d. Proposed measures to preserve or enhance wildlife, if any: [help]

There are no proposed measures to enhance wildlife. Every effort will be made to limit the impact footprint to the minimum amount of disturbance possible.

e. List any invasive animal species known to be on or near the site.

Invasive animals in this area may include nutria and bullfrog.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [help]

None

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: [help]

None

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [help]

No

1) Describe any known or possible contamination at the site from present or past uses.

None

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

None

4) Describe special emergency services that might be required.

None

5) Proposed measures to reduce or control environmental health hazards, if any:

None

b. **Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]

No noise will affect the project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [help]

On a short-term basis, machinery such as excavators would produce noise. These machines will operate between the hours of 6 am and 6 pm.

3) Proposed measures to reduce or control noise impacts, if any: [help]

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]

The surrounding land is within the estuary unit of the Skagit Wildlife Area. This is a public area. No current land uses will be affected with exception of the closure of the dike section to be worked on.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]

The area is not farmed for crop harvest.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

The proposal will not affect or be affected by surrounding business operations associated with farming or forestry. It will reduce flood impacts in high precipitation and high water events.

c. Describe any structures on the site. [help]

The site currently has diking systems and tidegates (5) that will be removed.

d. Will any structures be demolished? If so, what? [help]

The current tidegates will be demolished along with the dike that runs over it. The dike will be rebuilt once the new structure is in place.

e. What is the current zoning classification of the site? [help]

Public Open Space of Regional/State Importance

f. What is the current comprehensive plan designation of the site? [help]

Public Open Space of Regional/State Importance

g. If applicable, what is the current shoreline master program designation of the site? [help]

Natural

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]

The area is considered a critical area due to the presence of wetlands and flood hazard areas.

i. Approximately how many people would reside or work in the completed project? [help]
None.

j. Approximately how many people would the completed project displace? [help]
None.

k. Proposed measures to avoid or reduce displacement impacts, if any: [help]
None.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [help]
The land is owned by WDFW and is available to the public. Repairing the tidegate will allow for continued use of this area as a recreational opportunity and a habitat restoration area. It is especially conducive to the protection of juvenile salmonids.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:
The upkeep of a working tidegate will help to manage agricultural fields by reducing flooding in high water events.

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [help]
None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]
None.

c. Proposed measures to reduce or control housing impacts, if any: [help]
None.

10. **Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [help]
The tallest structure will be the handrail on the top of the dike at approximately elevation 18.0 feet.

b. What views in the immediate vicinity would be altered or obstructed? [help]
The dike will be rebuilt to the same height and no views will be obstructed.

c. Proposed measures to reduce or control aesthetic impacts, if any: [help]
None.

11. **Light and glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [help]
None.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [help]
No.

c. What existing off-site sources of light or glare may affect your proposal? [help]

None.

d. Proposed measures to reduce or control light and glare impacts, if any: [help]

None.

12. **Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity? [help]

The area is often used for bird hunting, walking . The nearby river provides an area for boating and access to the Sound's waters.

b. Would the proposed project displace any existing recreational uses? If so, describe. [help]

No. The project proposal will not alter recreation activities. The dike will be closed for the construction but will reopen when the project is complete.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [help]

There will be no impacts on recreation once the project is complete.

13. **Historic and cultural preservation**

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [help]

No recorded eligible buildings, structures, or sites within the project area. The nearest archaeological surveys (Rader 1998; Iverson 2012; Storey 2011) did not result in the identification of archaeological deposits.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]

There are no recorded landmarks, features, or other evidence of Indian or historic use or occupation. Nearby surveys have not resulted in the identification of any archaeological deposits, landmarks, features, human burials, artifacts, or areas of cultural importance. Nearby projects, where in-depth cultural resources surveys have been conducted (e.g., Bush 2011a, 2011b, Stipe 2009) have resulted in the identification of significant precontact archaeological sites. The nearest of these is approximately 1 mile from the project. The landscape is one considered to have a high probability to contain both historic and precontact cultural resources.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]

The project was reviewed by the WDFW archaeologist, who conducted an assessment of the likelihood that the project would encounter archaeological resources. Project review

included a review of local land use history, previous cultural resource studies, and local geomorphology. The assessment was based on archival review, an understanding of local expressions of precontact and historic era settlement patterns and a consideration of the scope and nature of the proposed project. The landscape is one considered to have a high probability to contain both historic and precontact cultural resources. The WDFW archaeologist has recommended that a cultural resources survey of the project area would be appropriate. Consultation with the area tribes will be initiated as part of WDFW's review of this project.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

A cultural review of the project would include consultation with local tribes. The results of this consultation, consultation with DAHP would be used to further inform project design to avoid or minimize disturbance to any identified resources. If cultural resources are identified within or near the project, the project would be constructed under a Cultural Resources Management Plan reviewed by WDFW's consulting partners. If no cultural resources are identified during the survey, the project would operate under WDFW's Inadvertent Discovery Plan. If project encounters archaeological deposits or features, WDFW's Inadvertent Discovery Plan should be enacted. Contractors and WDFW staff will be briefed on the plan prior to project initiation.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help]

The dikes can be traveled with vehicles to reach the site.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]

The site is not served by public transit. The nearest bus stop is approximately 6.2 miles away at the South Mount Vernon Park and Ride.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help]

The proposal does not add parking spaces.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]

No new improvements will be made to roads.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help]

The project will not occur in the vicinity of any of these.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help]

We do not anticipate the number of vehicular trips to increase.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any: [help]

None.

15. **Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]

No.

b. Proposed measures to reduce or control direct impacts on public services, if any. [help]

None.

16. **Utilities**

a. Circle utilities currently available at the site: [help]

None.

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [help]

None.

C. Signature [HELP]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of signee Christina Gourley

Position and Agency/Organization WDFW Biologist

Date Submitted: 12/16/14